

KIRKBY-IN-ASHFIELD

Urban District Council.

ANNUAL REPORT

FOR 1898,

BY

JOHN MACKENZIE,

MEDICAL OFFICER OF HEALTH.

SUTTON-IN-ASHFIELD :

F. W. BUCK AND SONS, "FREE PRESS" OFFICE.

KIRKBY-IN-ASHFIELD

Urban District Council.

Chairman :

J. W. ELLIOTT, ESQ., J.P.

Vice=Chairman :

J. G. SHACKLOCK, ESQ.

Councillors :

East Ward.

J. W. ELLIOTT
W. RIGLEY
J. G. SHACKLOCK
JOHN MERCER
WM. DAVISON.

West Ward.

WM. HEATH
ED. HAYES
GEO. HY. HUNT
BENJ. MADEW
FRED. R. SHARLEY.

South Ward.

WM. EDGE
GEO. SMITH
JOSEPH SMITH
JOHN TOMLINSON
GEO. KNOWLES.

Clerk :

GEO. H. HIBBERT, ESQ., SOLICITOR.

Medical Officer of Health :

JOHN MACKENZIE.

Surveyor :

WM. DODSLEY.

Sanitary Inspector :

JOHN TODD GELSTHORPE.

Collector of General and District Rate :

JOHN HOGG.

REPORT.

To the Chairman and Members of the Urban District
Council of Kirkby-in-Ashfield.

GENTLEMEN,—

I again beg to submit to you my Annual Report. The Urban District of Kirkby-in-Ashfield is divided into three Wards, East, West, and South. It has an area of 5,590 acres, and an estimated population of 8,809.

In the East Ward there are 708 inhabited houses, in the West Ward 524, and in the South Ward 683. Compared with 1897 this shows a decrease of one for the East Ward, an increase of 64 for the West Ward, and of 43 for the South Ward. The explanation of the slight decrease in the number of inhabited houses in the East Ward, though several new ones have been built, is owing to a local strike, which has caused families to leave the district.

Copies of Tables A. and B., prepared for the Local Government Board and County Council, will be found at the end of the Report.

354 Births were registered during the year, equivalent Birth-Rate. to an annual birth rate of 40·18 per 1,000 of the population, occurring quarterly as follows :—

	Males.	Females.
1st Quarter.....	55	43
2nd „	46	39
3rd „	46	39
4th „	52	34
Totals 1898 ...	199	155
Totals 1897.....	190	208

Births occurring quarterly in each Ward.

The following Table shows the Births in each Ward :—

	East Ward.	West Ward.	South Ward
1st Quarter... ..	55	21	22
2nd „	39	23	23
3rd „	33	20	32
4th „	30	27	29
Totals 1898 ...	157	91	106
Totals 1897 ...	178	79	141

Birth Rate for the last three years :

1896	...	...	...	41.5 per 1000
1897	...	...	...	46.40 „
1898	...	..	...	40.18 „

A decrease on 1897 of 6.22.

Death-Rate.

140 Deaths were registered, equivalent to an annual mortality of 15.8 per 1,000 of the population, occurring quarterly in Wards as follows :—

Deaths occurring quarterly in each Ward.

	East Ward.	West Ward.	South Ward.
1st Quarter... ..	13	12	12
2nd „	8	9	14
3rd „	19	7	7
4th „	16	7	16
Totals 1898 ...	56	35	49
Totals 1897 ..	58	24	47

Death-Rate for the last three years :

1896	...	...	...	19.0 per 1000
1897	..	...	...	15.04 „
1898	..	...	...	15.8 „

54 Deaths were registered under 1 year of age, equivalent to an annual mortality of 152.54 per 1000 registered births, 385.71 per 1000 total deaths, and 6.13 per 1,000 total population living; occurring quarterly in Wards as follows :—

				East Ward.		West Ward.		South Ward.		Infant Mortality occurring quarterly in each Ward.
				Under 1 year.	1 and under 5 years.	Under 1 year.	1 and under 5 years.	Under 1 year.	1 and under 5 years.	
1st Quarter	...	...	...	7	2	3	1	4	1	
2nd	„	...	...	3	1	1	2	5	2	
3rd	„	...	...	14	1	3	2	4	1	
4th	„	...	...	5	3	1	...	4	8	
Totals 1898	...	..	...	29	7	8	5	17	12	
Totals 1897	...	...	...	21	13	7	2	28	4	
Totals 1896	...	...	...	35	14	12	8	16	11	

Infant Death Rate for the last three years :

1896	...	...	186.94 per 1000 Births.
1897	...	...	140.70 „ „
1898	...	..	152.54 „ „

It will be observed that the Infant Death Rate for 1898 is higher by 11.84 than 1897, notwithstanding the fact that this year the total number of deaths are less by two than last year, but the Birth Rate, on which Infant Mortality is calculated, is also less by 44; hence the increase.

8	due to	Premature Birth, 5 of which only survived a period varying from 15 minutes to 13 hours.	Detailed causes of Infant Mortality.
1	„	Whooping Cough.	
4	„	Enteritis.	
12	„	Diarrhœa.	
2	„	Influenza.	
5	„	Marasmus.	
1	„	Meningitis.	
3	„	Debility from Birth.	
1	„	Thrush.	
2	„	Pneumonia.	
8	„	Bronchitis.	
2	„	Teething.	
1	„	Gastritis.	
4	„	Cause not certified.	

Premature
Births.

The Deaths registered from Premature Birth, though necessarily increasing the Infant death-rate (always a valuable index to the health of a community) point to the ill health and insanitary environments of the parents rather than their offspring.

In this connection I may also observe that 18 still births were registered, according to the Cemetery Superintendent's report.

Diarrhœal
Mortality.

Of the 15 Deaths from Diarrhœa at all ages, 12 occurred in Infants under one year, to which must be added the four Deaths returned as due to Enteritis, which in all likelihood were of a Diarrhœal origin.

No doubt the predisposing cause of this Diarrhœal Mortality was the extreme heat experienced in September and October, during which months the Deaths occurred ; but we must not overlook other causes, e.g. :—

- (a) The insanitary state of many streets and backyards containing midden privies, and large unused water-cisterns, in many instances with untrapped overflows into the sewers.
- (b) Injudicious Feeding ; many mothers begin to feed their infants with solid food at the early age of three and four weeks.
- (c) The well-known fact that when the temperature of the atmosphere penetrates the earth to a certain distance, toxins escape, which find their way into both food and drink, and give rise to diarrhœa. It is this last fact which makes it so necessary that all backyards, passages and courts should be either asphalted or blue-bricked, so as to prevent the escape of these disease-producing germs during summer heat.

Deaths from
Bronchitis,
Pneumonia,
and
Influenza.

Bronchitis, Influenza, and Pneumonia are responsible for 10 deaths during the first and last quarters of the year. It is often to be observed that infants suffering from these acute diseases are carelessly exposed, and indeed in many homes the conditions are such that satisfactory nursing would be an impossibility, if it were not for the services of our district nurse, who is quite as useful in imparting sound knowledge to poor mothers as in rendering personal attention to the young patients.

Notifiable Zymotic Diseases occurring in Each Ward :—

				East Ward.	West Ward.	South Ward.	Notifiable Zymotic Diseases.
Scarlet Fever	...	...	38	9	18		
Diphtheria...	...	.	3	2	...		
Membranous Croup	...	...	1	...	...
Typhoid Fever	...	...	12	7	4		
Typhus Fever	...	...	...	...	...
Puerperal Fever	...	...	...	...	...
Erysipelas	...	...	4	5	5		
Totals 1898	...	...	58	23	27		
Totals 1897	...	...	39	21	24		

Deaths from Zymotic Diseases occurring in each Ward :—

	East Ward.	West Ward.	South Ward.	Deaths from Zymotic Diseases.
Scarlatina	3	...	...
Diphtheria ... ..	...	...	...
Typhoid or Enteric	1	1	1	
Typhus Fever ... ..	...	...	...
Puerperal Fever ... ..	...	...	...
Measles ... ..	..	...	4	
Whooping Cough	1	...	3	
Diarrhœa	8	3	4	
Erysipelas ... ..	...	...	1	
Totals 1898	13	4	13	
Totals 1897	7	4	7	

Notifiable Zymotic Diseases occurring in each Month :—

Monthly
Zymotic.

		Scarlet Fever.	Diphtheria.	Membranous Group.	Typhoid Fever.	Typhus Fever.	Erysipelas.	Puerperal.
January	...	1	...	...	...	...	...	...
February	...	1	...	...	...	...	...	...
March	...	1	...	...	...	...	...	...
April	...	1	...	...	3	...	...	...
May	...	1	...	1	...	...	1	...
June	...	...	...	...	2	...	...	...
July	...	1	...	...	3	...	...	...
August	...	1	...	...	...	...	2	...
September	...	5	...	...	2	...	2	...
October	...	14	1	...	6	...	2	...
November	...	29	4	...	6	...	4	...
December	...	10	...	...	1	...	3	...
Totals 1898	...	65	5	1	23	...	14	...
Totals 1897	...	27	2	6	37	1	11	...

Deaths from Zymotic Diseases occurring in each Month :—

Monthly
Zymotic
Deaths.

		Measles.	Scarlet Fever.	Diphtheria.	Typhoid.	Typhus.	Erysipelas.	Puerperal Fever.	Membranous Group.	Whooping Cough.	Diarrhoea.
January	...	...	1	...	...	...	...	...	...	...	1
February	...	...	...	...	...	...	...	...	...	...	...
March	...	...	...	...	...	...	...	...	...	1	...
April	...	...	...	...	...	...	...	...	...	...	...
May	...	...	...	...	...	...	...	...	...	1	...
June	...	...	...	...	...	...	...	...	...	2	...
July	...	...	...	...	...	...	...	...	...	...	...
August	...	...	...	...	1	...	...	...	...	...	2
September	...	...	...	...	...	...	...	...	...	...	3
October	...	...	...	...	1	...	...	...	...	...	7
November	...	2	1	...	1	...	...	...	...	...	1
December	...	2	1	...	...	...	1	...	...	...	1
Totals 1898	...	4	3	...	3	...	1	...	...	4	15
Totals 1897	...	...	1	1	4	1	...	...	...	5	6

Deaths from other than Zymotic Diseases occurring
Monthly in each Ward :—

			East Ward.	West Ward.	South Ward.	Deaths from other than Zymotic Diseases.
January	...	...	3	5	3	
February	...	...	4	2	1	
March	...	...	4	4	8	
April	...	...	3	3	5	
May...	...	...	4	4	4	
June	...	...	1	1	3	
July...	...	..	5	1	1	
August	...	...	3	4	...	
September	...	...	7	1	5	
October	...	...	5	2	1	
November	...	...	2	2	3	
December	...	...	2	2	2	
Totals 1898	...		43	31	36	
Totals 1897	...		52	21	38	

**Zymotic
Death Rate.**

Zymotic Death-Rate, 1896	...	3·47	} not including Dysentery and Diarrhœa.
" " " 1897	...	1·39	
" " " 1898	...	1·72	

**Mortality in
Wards.**

The Statistics of 1898 show that the West Ward, as last year, is the healthiest, notwithstanding the fact that the principal increase of the population (judging by the number of new houses erected) has occurred in this Ward. It has the lowest infant, and the highest old age mortality, viz.: 8 and 12 respectively.

The South Ward, which was the most unhealthy last year, comes second this year, in spite of a mild epidemic of Measles following last year's Whooping Cough:—Infant mortality, 17; old age mortality, 8.

The East Ward takes the lowest place this year, chiefly owing to density of population, always a factor in increased mortality. I must also note the presence of Scarlet Fever and Diphtheria in this Ward.

It is satisfactory to note that the Scarlet Fever of the East Ward and the Measles of the South Ward did not extend to the West Ward at any time of the year.

Inquests.

Five Inquests only were held, against 10 in 1897. One death was due to opium poisoning, one to "natural causes," three to injuries, only one of which was received in the course of employment (turnip cutting). This shows with what care the hazardous industry of coal mining is carried on in this locality, no coal miner having met his death in his employment in my district.

Enteric Fever.

Twenty-three cases were notified, against 37 last year. It is satisfactory to record such a decrease of Typhoid, considering that in the Autumn, particularly September and October with oppressive heat, Dysentery and Diarrhœa in the district assumed the form of an epidemic. It will be seen from the foregoing tables that 12 cases occurred in the East Ward, seven in the West Ward, and four in the South Ward.

The history of these cases is interesting and instructive, as showing the varied causes from which Typhoid springs, and what is more important still, that the causes are largely preventible. The aetiology of the cases may be roughly divided into three classes (1) Importation, (2) Impure Water, (3) Insanitary Surroundings.

**Causes.
(1) Importation.**

(1) A girl went as servant to a house in Birmingham on May 8th. Several of the family were suffering at the time from Typhoid Fever. She soon contracted the

disease, and on June 4th she was sent home seriously ill. It is remarkable that the Sanitary Authorities of that City never advised us of the case.

(2) Six cases occurred in young workmen at one of the neighbouring collieries, who drank freely from a rivulet that passes through the works. This stream at its origin is nothing more or less than diluted sewage, clarified during its course down a gentle slope. Knowing from experience the dangerous nature of this stream, I early in the summer drew the attention of officials and workmen to the fact that the worst epidemic of Typhoid we ever had in Kirkby was derived from here. The officials from time to time repeated this warning to the workmen, but without avail. Some people will cling to their belief in the superiority of water from wells and streams. The works are now supplied with district water.

(2) Impure Water.

(3) Seventeen cases were due to insanitary surroundings, which call for more detailed description, inasmuch as they arose from faults easily remedied, to which I have most earnestly called your attention in my two former reports.

(3) Insanitary Surroundings.

Four cases occurred in the East Ward in houses where kitchen and bedroom slops were received in deep sumps. These sumps were simply covered by an untrapped grating, and moreover had their overflow into the sewer nearly at the top, and also untrapped. A sump constructed like this is simply a cesspool, for most of its contents remain stagnant, causing very foul smells. The owners have remedied this evil by replacing these sumps with properly cemented, glazed earthenware traps. There are, however, many more cases of this class in this district, in which I fear nothing will be done till it becomes a case of locking the stable door when the steed is stolen.

Untrapped House Connections.

Another case emphasizing the vicious and dangerous principle of passing the rain water pipes untrapped into the sewer occurred at a house in Hodgkinson-road, where the house was provided with tub closets and a yard in fairly good condition, yet all summer the inmates were seriously annoyed with foul smells when the kitchen window was opened. When the case was notified, I examined the premises and found that the last joint of the water pipe, running along the side of this window, was perfectly loose, sewer gas freely escaping. As I have often reported before, these pipes should be made to discharge over grated gullies in the open, as then it would be immaterial whether the joints were loose or cemented, but

Passing Rain Water Fall Pipes into the Sewer Untrapped.

in their present condition they are a source of real danger. The owners of this property and several others throughout the district have disconnected the water pipes in the manner recommended by the Local Government Board. If the Council made an order, I feel certain that the owners of property would readily agree to the alteration, which is not an expensive one. I observe that the Council Surveyor now insists on all new houses having their water pipes properly disconnected.

Two cases at Nuncargate in the South Ward and one in the West Ward occurred in houses where the house waste was discharged into the ill-constructed sumps already described, with the additional fault that the drinking water tap was placed immediately over the sump.

Another case, in an outlying district, where there is but little hope of obtaining a pure water supply, was apparently due to drinking water from a well in the back garden only a few feet from a midden closet.

Soil Infection
in Typhoid.

Eight other cases, five in the East Ward, two in the West Ward, and one in the South Ward were in all likelihood due to soil infection, i.e. :—Houses surrounded by contaminated subsoil, backyards, passages, and frontage unbricked. It is now well-known that in the absence of impermeable covering, disease germs will live and multiply in such congenial soil from year to year, and ultimately finding access to food, drink, and atmosphere used by the inmates, give rise to Typhoid Fever.

Diphtheria and
Membranous
Croup—post-
Scarlatinal.

Five cases of Diphtheria and one Membranous Croup were notified. The Diphtheria cases, three in the East Ward and two in the West Ward, were all post Scarlatinal. Until the Scarlet Fever outbreak the district was free from Diphtheria, but as an acute inflammation of the throat is one of the principal lesions of Scarlet Fever, and Diphtheria but seldom attacks a healthy throat, hence patients suffering from Scarlet Fever are peculiarly liable to Diphtheria, should they happen to come in contact with the specific poison of that ruthless disease. I, therefore, beg to give it as my opinion, that when Scarlet Fever is prevalent in the district, the poisonous diphtheria germs arising from the faulty nature already described of so many of our rain waterfall pipes and house drains have a special facility for exhibiting themselves. *Moral*—improve the drains.

Whooping-Cough has been prevalent in the South Ward during the first half of the year, and accounts for three deaths. The disease is not notifiable, and as many of the cases were mild no medical attendance was required. So far as could be ascertained from visiting absent scholars, isolation and disinfecting were carried out. Whooping Cough.

Measles, which so often follows Whooping-Cough, Measles. was present in the South Ward during the last half of the year. On two occasions in the West Ward imported cases were discovered at the beginning and were prevented from spreading by excluding from school all the children in the near neighbourhood of the infected houses. In the South Ward, with many children but recently recovered from Whooping Cough, similar methods failed to arrest its spread.

Five deaths were registered from Phthisis as against seven last year. The question of the prevention and stamping out of Phthisis, *i.e.*, Consumption, is just now exciting much public interest—and small wonder, when it is borne in mind that 60,000 die yearly from this complaint in England and Wales. The notion that this fell disease was hereditary, and came by the inscrutable decree of Providence, is now abandoned. Whatever truth there may be in the idea of its heredity, leading authorities agree that Phthisis is highly infectious, and moreover that it can be prevented like other infectious diseases by proper precautions. Phthisis.

The two chief causes of consumption are :—

Its Causes and Prevention.

- (1) Milk from tubercular cows.
- (2) Living in overcrowded houses.

There are three points which should be noted in the prevention of consumption :—

- (a) Milk should be sterilised by boiling immediately before use. This is particularly necessary in the case of infants, whose digestive secretions are weak and therefore unable to act as a protection against the presence of tubercle in the stomach.
- (b) People suffering from pronounced form of Consumption should sleep by themselves, and their sputa should be received in a vessel containing some absorbant material that can be burnt, *e.g.*, sawdust, or a solution of carbolic acid, 1 in 40.
- (c) The bedrooms in which consumptive patients die should be thoroughly disinfected.

Influenza.

Influenza paid us its annual visitation towards the end of the first quarter of the year, and is credited with eight deaths, which, as might be expected, occurred in the aged and very young. An important fact to be borne in mind about this scourge is that it seldom kills of itself, but almost always by complications, and these complications are induced by exposure whilst suffering from the complaint. The great treatment for Influenza is to rest in bed till all feverish symptoms have disappeared.

Scarlet Fever.

During the last quarter of the year Scarlet Fever has been very common throughout most of the district. Sixty-five cases in all were notified, 38 in the East Ward, nine in the West Ward, and 18 in the South Ward. The nine cases in the West Ward were in Station-street and Linley-lane, streets immediately adjoining the East Ward. The East and West Ward cases had all a common origin. A boy from Linley-lane, who had spent his school holidays at Mansfield and Skegness, was taken ill on the 13th August and sent home, and on the 17th I saw him with a fully-developed Scarlet Fever rash. The disease was then carried into the East Ward owing to this family trading at a grocer's shop in New-street, where on September 19th one of the children was taken ill. Every precaution within lawful limits was taken, but on the 18th October three more cases were reported from the same street in the house of neighbours also trading at the shop. Immediately on my advice the Sanitary Committee excluded from school all the children from New-street for a time with a view to arresting the outbreak. Notwithstanding these precautions one or two local events materially helped to spread the complaint. Towards the end of October a travelling circus visited the place, the schools had a half-holiday, and nearly all the children attended the circus. At the same time the annual "feast" or "wakes" commenced; these festivities continue for the whole week and are much patronised by the younger portion of the community. Anticipating a recrudescence of Scarlet Fever, I kept a sharp look out, and found children from the infected houses mingled with others in swing boats, on merry-go-rounds, and at shooting galleries. The result, as might be expected, was a great increase in the incidence of the disease, 28 cases being reported during the last week in October and the first two weeks in November. During December ten more cases were notified, and up to time of writing (end of January, 1899) 15 cases have occurred. Only one case from 1st to 19th February, date of going to press.

Events
Contributing
to the Spread of
Scarlet Fever.

Eighteen cases occurred in the South Ward, mostly at Portland Row, a hamlet on the borders of Selston parish, from which parish the infection spread, Scarlet Fever having been common there throughout the summer. I have no doubt the channel through which the infection travelled was the Portland Row Infant School, as most of the scholars come from Selston parish. The epidemic was a mild one, three deaths occurring, and one of these was seriously complicated with Diphtheria.

Portland Row
Cases of a
different origin.

There are three factors largely contributing to the spread of Scarlet Fever :—

- (a) School-life.—Cases of a mild nature, not coming under the notice of a doctor ; hence children of the family attend school. In three cases I found children with a well-marked Scarlet Fever rash going to school.
- (b) The mingling of children in the same street, and personal intercourse between the households.
- (c) Imperfect disinfecting.—Hitherto the Council has not provided for disinfecting ; legally the owner or occupier is required to do so, but practically the occupier does it always, the process simply consisting of fumigating with sulphur, scrubbing and whitewashing the walls and ceilings. The time has arrived when this work should be done by a servant of the Council, and a proper disinfectant provided. Disinfecting is carried on chiefly in the interests of the community at large, hence the community should pay.

Notified cases are at once visited and isolated, children of the family kept from day and Sunday schools for about eight weeks ; a list of infected houses is periodically sent to the Superintendents of Sunday schools and the Clerk of the School Board with instructions that no scholars from these houses shall be admitted until a medical certificate is produced stating that their homes are free from infection.

Means of
preventing
spread.

The M.O.H. at stated intervals attends at the School Board Offices for a list of scholars absent through illness ; if the cause of absence is not known they are visited and examined with a view of ascertaining whether they are suffering from infection or not. Let me here express my thanks for the cordial co-operation of the Head Teachers of the Schools and Mr. Smalley, Clerk to the Board.

GENERAL REMARKS.

The Public Elementary Schools' lavatories and closets, all private slaughter-houses and bakehouses were regularly inspected every quarter by the M.O.H. Two bakehouses in the East Ward were enlarged and improved.

In the East and South Wards we have excellent public schools, and in the West Ward a new school is being erected to replace the old one.

Sewerage.

The Sewerage of the district is satisfactorily dealt with by irrigation on two pieces of land, one belonging to the Council at East Kirkby, the other for Annesley Woodhouse sewage being rented from J. P. Musters, Esq., of Annesley.

Operations for the new Sewage Scheme are now in full progress. When the scheme is completed it will embrace the whole of the West Ward, forming a junction with the East Ward at the present outfall, also the unsewered portions of the South Ward except the hamlets of Todd's Row and Portland Row, which are to be provided for separately.

Let me here observe that nothing has been done to carry out the recommendations of the Committee appointed last year to report on the insanitary condition of Todd's Row. Let me also remind you that the sewers of East Kirkby still require (a) ventilation, (b), means of flushing, (c) proper and systematic trapping of all house-connections.

New Sewage Outfall.

The situation of the new Sewage Farm seems to me to call for special remarks for the following reasons :—A public footpath runs through it ; the sludge beds and outfall are rather near the highway ; and especially, the tributary of the River Erewash, into which the effluent will be discharged, is at this point only a very small stream, particularly in dry weather. The standard of purity of the effluent must therefore be very high.

It is also doubtful whether the class of tank (Cosham's) proposed to be erected here will prove efficient, because by this system the effluent cannot be effectively treated without chemicals, notwithstanding what may be said to the contrary. Effluents treated by chemicals, filtration and irrigation, as seen at some of the Sewage Farms in the neighbourhood, produce large quantities of sludge ; sludge requires much labour for removal, decomposes and gives rise to offensive smell, thereby creating a nuisance. Again, however clear an effluent may be rendered by chemical precipitation, it is subject to deferred or secondary decomposition if the volume of water into which it discharges is not ample.

The history of sewage purification has been one of transition, changing with almost kaleidoscopic rapidity, each

new method proving inadequate and giving rise to a new one. There are just now two particular systems receiving special attention:—the Exeter Septic Tank and the Bacteria Tanks (Dibdin's), their chief recommendation being ability to purify sewage without chemicals and leave no sludge.

It would be well if the Council made further investigations into the merits of these systems before laying down their new plant. This much may be said with confidence; Bacterial purification of sewage, as of every other putrescent matter, is nature's method, and there can be but little doubt that the difficult problem of sewage disposal will be ultimately settled on nature's lines.

Three water carts were bought this year by the Council for watering the roads in dry weather, a much needed improvement.

Several old houses hitherto using deep wells have been since my last report supplied with district water. Water Supply.

On July 19th, 1898, Major General Crozier, Local Government Board Inspector, held an inquiry into the subject matter of the Council's application to borrow £9,200 for Works for water supply. There was no opposition to the scheme, and the Inspector having given a favourable report the Local Government Board have sanctioned borings, which are now well advanced.

After these two schemes—the Sewerage and Water Schemes—from which the community anticipate so much, are completed, the Council's urgent attention must be directed to the condition of our streets, many of which are little better than swamps, impassable for men and animals. Street Improvement.

It must be borne in mind that until the Urban Council came into existence the streets were never touched, but the Private Streets' Improvement Act has been adopted last year, and during this year three important streets have been put into thoroughly good condition and the work is still going forward, for at its last meeting the Council wisely agreed to improve two streets at a time, seeing that the case is so urgent. It is to be hoped that this enlightened policy will continue until the improvement is complete.

In December, 1898, the Urban Council entered into an agreement with the Rural District Council of Basford, by which patients suffering from Scarlet Fever, Enteric Fever, or Diphtheria may be admitted into the Basford Sanatorium. The number of beds set apart for the use of the Urban Districts in the Basford Union are ten, and the Rural District Council give notice that if these are required for their own use they will refuse outsiders. Isolation Hospital.

It is clear that this arrangement cannot in any sense be considered as providing satisfactory isolation, even in the case

of the diseases admissible, especially as other Urban Districts have entered into a like agreement for a share in these ten beds.

Small-pox, it will be noticed, is not one of the admissible diseases, and considering how vulnerable this district is to this and other epidemics, owing to our shifting population, I again beg to draw your serious attention to the necessity of endeavouring to combine with the neighbouring Sanitary Authority (Sutton) for the erection of an Isolation Hospital.

I remain, Gentlemen,

Your Obedient Servant,

JOHN MACKENZIE.

Summary of Sanitary Work done in the Inspector of Nuisances Department during the year 1898 :—

	Inspections made.	Informal Notices served by Inspector.	Legal Notices by Authority.	Nuisances abated after Notice.
Defective Drainage of Land	3	3	...	3
Dwellinghouses :—				
Overcrowding ..	3	3	..	3
Ashpits and Privies ..	30	30	...	18
Deposits of Refuse Manure	5	5	..	5
House Drainage :—				
Defective Traps and no Connections ...	24	24	...	18
Water Supply ...	...	1	...	1
Offensive Trades ...	1	1	...	...
Other Nuisances ...	11	11	...	11

The foregoing cases were submitted to the Council monthly as follows :—

January	February	March	April	May	June
16	8	8	0	8	4
July	August	September	October	November	December
6	5	8	0	12	3

Samples of Water taken for Analysis ..	...	...	3
" " condensed as unfit for drinking ..	...	...	3
Houses disinfected after Infectious Disease ..	...	...	108
Schools disinfected before re-opening after Infectious Disease ... ..	...	...	4

(B) TABLE OF POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS SICKNESS coming to the knowledge of the Medical Officer of Health, during the Year 1898, in the Kirkby-in-Ashfield Urban District, classified according to Diseases, Ages, and Localities.

Population at all Ages.				New Cases of Sickness in each Locality coming to the knowledge of the Medical Officer of Health.													
NAMES OF LOCALITIES adopted for the purpose of these Statistics ; Public Institutions being shown as separte localities.	Last Census.	Estimated to middle of 1898.	Registered Births.	(c)	(d)	Aged under 5 or over 5.	(e)	Smallpox.	Scarlatina.	Diphtheria.	Membranous Group.	FEVERS.					
												Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.
(a)	(b)	(c)	(d)	(e)													
Kirkby-in-Ashfield Urban District..	...	...	157			{ Under 5 5 upwds.		...	9	...	...	...	...	...	...	1
East Ward ...	...	...	91			{ Under 5 5 upwds.		...	29	3	1	...	...	...	...	3
West Ward ...	...	...	106			{ Under 5 5 upwds.		...	1	2	...	...	...	...	...	1
South Ward ...	...	...	...			{ Under 5 5 upwds.		...	10	...	...	...	...	...	...	4
Totals ...	6533	8809	354			{ Under 5 5 upwds.		...	8	...	...	...	...	...	...	5
								
								...	20	...	...	...	...	...	...	2
								...	45	5	1	...	...	...	...	12